10711TM

31-250 DRUM SANDER
TABLE ALIGNMENT AND BELT TENSIONING INSTRUCTIONS

This instruction sheet provides the information necessary to align the raising and lowering of the table mechanism and adjusting the belt tension for the Delta Model 31-250 18/36 Drum Sander.

DISCONNECT THE MACHINE FROM POWER SOURCE BEFORE SEVICING, MAKING REPAIRS, OR WHEN CHANGING ACCESSORIES.

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1. Disconnect table feed belt motor power cord.
2. Remove the table from the unit. **CAUTION**: *Do not rotate table elevating handwheel while table is removed from machine.*
3. The table rests on two support bars. These bars must first be made level. Place a 2" or 3" block of wood, metal, etc. under the table support bars on the base next to any screw. Use an Allen wrench to loosen the Allen screw that attaches the support bar to the screw. Turn the screw up or down until the table bar barely clears the block. **NOTE**: *Check clearance at all four screw locations. They should be within 1/16" of each other. These will be fine-tuned later in these instructions.*
4. Tighten the four Allen screws.
5. Notice that the two elevating screws and support bar on the open end will either lean in or out. This is normal. Move the support bar to the left or right to plumb the screws.
6. Reinstall the table and tighten the two table mounting screws closest to the column. **NOTE***: Check for clearance between the table clearance hole and the lock washer below it.*
7. Check to see if a gap exists between the bottom of the table and the table support bar on the open end. If so, loosen the Allen screw on that elevating screw and turn the elevating screw until the support bar barely touches the table. Tighten the Allen screw. Check for clearance on the other end of the support bar. If necessary, perform the same operation on that end.
8. Tighten the other two table mounting screws. (Reconnect table feed belt motor power cord.)
   NOTE: *If a major adjustment has been made, **c**heck the height of the table. These procedures are outlined in the 31-250 instruction manual.*
9. Check the tension on the timing belt. If the belt is too tight, the table will be very difficult to raise or lower. A loose timing belt may cause the belt to jump a tooth on the timing gear.
10. Check the deflection in the middle of the long span of the belt. Correct tension requires no more than ¼" deflection. To adjust, find the 5/16" nut on the base between the two elevating screws. Use a ½" wrench to loosen this nut. Slide the roller until the tension is correct, then re-tighten the nut. **NOTE:** *Be careful not to over-tighten the nut, because it might crush the spacer inside. Approximately 50 in/lbs of torque will be sufficient. To be certain that the spacer is not damaged, grasp the idler roller. If it can be moved about 1/8" vertically, the spacer is all right.*
11. Place a few drops of light oil on each screw.
12. Carefully turn the handwheel to observe the raising and lowering of the table.
13. Listen carefully for a click or knock. This sound will indicate that the timing belt is jumping teeth on the gears. Stop turning immediately, and check the three elevating screws with thrust/bearing washers. The washers should move slightly horizontally, but should have no movement vertically. No horizontal movement of the washers will indicate a bind and could mean that the lock nut is too tight. To loosen the lock nut, first locate the 2" hex nut underneath the gear. Use a wrench or channel lock pliers to hold it securely. Turn the top nut 1/16th of a turn or less with a 1-1/16" wrench.
14. Again, carefully turn the handwheel to recheck.
15. If the table raises and lowers correctly (with 25 in/lb or torque or less), the alignment is complete.